

SUBCOMMITTEE NO. 2

Agenda

Sheila Kuehl, Chair
Bob Dutton
Alan Lowenthal



Wednesday, May 17, 2006
9:00 a.m.
Room 4203

Part I - Agenda

<u>Item</u>	<u>Department</u>	<u>Page</u>
Climate Change Initiative		2
0555	Secretary for Environmental Protection	4
3360	California Energy Commission	5
8660	California Public Utilities Commission	8
3900	Air Resources Board	11
3910	Integrated Waste Management Board	13

Resources—Environmental Protection—Energy—Utilities

Pursuant to the Americans with Disabilities Act, individuals who, because of a disability, need special assistance to attend or participate in a Senate Committee hearing, or in connection with other Senate services, may request assistance at the Senate Rules Committee, 1020 N Street, Suite 255 or by calling 916-324-9335. Requests should be made one week in advance whenever possible.

Climate Change Initiative

Background. In June 2005, the Governor signed Executive Order S-3-05, which set the following greenhouse gas emission reduction targets:

- By 2010—Reduce GHG emissions to year 2000 levels.
- By 2020—Reduce GHG emissions to year 1990 levels.
- By 2050—Reduce GHG emissions to 80 percent below year 1990 levels.

Previous Subcommittee Direction. At the April 3 meeting of the Subcommittee, the Governor's Climate Change Initiative was heard. At this meeting, the Subcommittee requested a detailed plan for achieving GHG emission reduction goals, including a comprehensive research portfolio. The Subcommittee also requested a plan for measuring greenhouse gas (GHG) emissions, including tools to evaluate the efficiency and cost effectiveness of different emission reduction strategies.

Climate Action Team Report Released. On April 3, the administration released its Climate Action Team report. This report outlines the following key recommendations to meet the GHG emission reduction goals outlined in the Governor's 2005 Executive Order:

- Develop a multi-sector, market-based program, which considers trading, emissions credits, auctions, and offsets, by January 1, 2008.
- Establish mandatory emissions reporting from the largest sources: oil and gas extraction, oil refining, electric power, cement manufacturing, and solid waste landfills.
- Establish a multi-generational public education campaign to ensure the public is informed about climate change and what they can do to reduce emissions.
- Complete a cost effectiveness analysis of all the strategies recommended in the report by July 2007.
- Establish an aggressive alternative fuels program, including developing an aggressive bio-fuels program this year.
- Enforce an electricity sector carbon policy that requires long-term commitments to new electricity generation from sources with GHG emissions, equivalent to or less than a new combined cycle natural gas power plant.
- Ensure that all utilities meet the energy efficiency goals and Renewable Portfolio Standard required of investor-owned utilities.
- Develop emission reporting protocols for local governments.
- Identify funding sources for reducing GHG emissions, including coordinating the state's investment strategy to lead technology development, establish a public goods charge on transportation, refocus PIER funding, and leverage other private sources.

In the report, the Climate Action Team has identified a menu of strategies for reducing GHG emissions. These strategies will be implemented by the following agencies:

- Air Resources Board;
- Integrated Waste Management Board;
- Department of Forestry and Fire Protection;
- California Energy Commission;

- Department of Water Resources;
- Business, Transportation and Housing;
- Department of Food and Agriculture;
- State and Consumer Services Agency; and
- California Public Utilities Commission.

Governor's Budget. The Governor's Budget includes \$7.2 million (\$135,000 in General Fund monies) to implement this initiative. The majority of this funding is for the Air Resources Board (ARB) and the Secretary for Environmental Protection, but activities are also funded at the California Energy Commission, the California Public Utilities Commission, and the Integrated Waste Management Board. More detailed descriptions of these budget proposals are contained in this agenda under each department.

May Revision. The May Revision proposes an additional \$500,000 from special funds to evaluate alternatives for climate change emissions reporting.

Budget Proposal Incomplete. Staff finds that the Climate Action Team has set forth an ambitious menu of actions that need to be accomplished to achieve the GHG emission reductions goals set forth in the 2005 Executive Order. Furthermore, staff finds that the budget proposal falls short of implementing the full compliment of strategies laid out in the Climate Action Team report. For example, the Governor has proposed no funding to implement some of the strategies to reduce GHG emissions, including funding strategies to increase forest conservation and water use efficiency.

Furthermore, the budget proposal provides only minimal funding for developing a comprehensive strategy for measuring and reporting the GHG emissions of the largest emitters. Mandatory reporting is highlighted as a key strategy to reducing GHG emissions, but this budget proposal does not provide sufficient funding to support a mandatory tracking program.

Staff also finds that the budget proposal is generally lacking in measurable goals and outcomes and does not specify timelines for completing tasks to ensure that the department is making progress in reducing GHG emissions.

Furthermore, the budget proposals continue to be skewed towards research as opposed to taking action to implement regulatory programs or incentive programs to reduce GHG emissions. Staff recognizes the importance of targeted research to fill data gaps and to help lay the groundwork for future regulatory programs, but it is not clear that all of the research being requested in the budget proposal is necessary.

Staff Recommendation. Staff recommends that the Subcommittee take the following actions:

- Adopt placeholder trailer bill language to fund activities to reduce GHG emissions. The trailer bill will tie all funding directly to recommendations and emission reduction strategies in the Climate Action Team Report. The trailer bill language will also create measurable outcomes for all studies and activities proposed for funding in the budget.

0555 Secretary for Environmental Protection

1. Climate Change Initiative

Background. The 2005-06 budget provided \$500,000 from the General Fund to the Secretary of Cal-EPA to support climate change activities. These monies were used to fund various studies to support the activities of the Climate Action Team. In addition to the development of a Scenario Analysis report and Cap and Trade report (see Climate Change Initiative Overview), the funds were also used to support studies on the economic impacts of climate change and the science of climate change. These funds are included in the base budget for the Secretary of Cal-EPA.

Governor's Budget. The Governor's Budget includes \$900,000 (\$135,000 in General Fund monies) in additional funds to fund two positions and \$595,000 in additional contracts to lead a statewide effort to meet the GHG emission reduction targets set by the Governor. Contract funding will fund technical support to continue the development and analysis of the various GHG emission reduction scenarios and the implementation of a cap and trade program.

May Revision. The May Revision proposes \$500,000 in one-time Air Pollution Control Fund monies to support contracts to evaluate alternatives for climate change emission reporting. Specifically, the funding will be used to review and make recommendations regarding the establishment of a mandatory reporting program within state government and to develop appropriate protocols for local and regional governmental reporting of GHG emission reductions.

Justification. It is unclear why the Secretary for Cal-EPA needs \$1.4 million in additional monies in the budget year mainly to support additional contracts to study ways of reducing GHG emission reductions. Staff finds that the Secretary already has \$500,000 in the base budget for these activities. Furthermore, there are no measurable outcomes or goals for these contracting funds, which makes it difficult to determine what outcome might result from the additional studies.

Staff Recommendation. Staff recommends that the Subcommittee take the following actions:

- Reject the Governor's budget proposal.
- Reject the May Revision proposal.
- Evaluate the need for additional monies in trailer bill discussions.

3360 California Energy Commission

1. Climate Change Initiative

Governor's Budget. The Governor's Budget proposes \$612,000 to support four positions and \$200,000 in contracts to implement the Governor's greenhouse gas (GHG) emission reduction targets. The new positions will support the following activities:

- Evaluate and verify electricity carbon policies.
- Evaluate and verify industrial carbon policies.
- Improve the statewide GHG emission inventory.
- Focus on economic issues related to climate change, including overseeing \$5 million in PIER contracts related to this subject.

Justification. The Commission has funded millions of dollars of climate change research through the PIER program. It is unclear why the commission cannot allocate funding from its PIER program to fund contracts to support the work requested in this budget proposal. Furthermore, there are no measurable outcomes or goals for these contracting funds, which makes it difficult to determine what outcome might result from the additional studies.

Staff Recommendation. Staff recommends that the Subcommittee reject this proposal and evaluate the need for additional monies in trailer bill discussions.

2. Public Interest Energy Research Programs

Background. The Public Interest Energy Research (PIER) program provides grant funds to public and private entities for research, development, and demonstration of electricity-related technologies. This program is funded by a public goods charge on electricity that is paid by electricity ratepayers of investor owned utilities. The surcharge generates \$62.5 million annually to fund this program.

In 2004, the California Public Utilities Commission (CPUC) issued a decision that established the PIER natural gas program and designated CEC as the administrator of the program. This program focuses on research and development of science and technologies that benefit natural gas end-users in all market sectors. The surcharge on ratepayers of natural gas investor owned utilities generates \$300 million annually and is continuously appropriated to the CPUC. The CPUC has issued a decision to allocate approximately \$12 million annually to the CEC for the PIER natural gas program. This program is scheduled to grow to \$24 million annually over the next few years.

Governor's Budget. The Governor's budget proposes \$504,000 to support five new positions to identify, develop, and manage energy-related research projects for the PIER natural gas program.

Previous Subcommittee Direction. At the April 3 meeting of the Subcommittee, additional information was requested from the commission on the joint planning process between CEC and

the Air Resources Board to ensure coordination of the state's energy and environmental research priorities. In addition, the Subcommittee requested the final draft of the PIER Five-Year workload and staffing plan.

Commission Response. The CEC indicates that it has formally engaged the ARB in a joint planning process and has developed a research plan that is contained in the 2006 Program Plan and Budget for the natural gas PIER program. The 2006 program plan allocated the natural gas PIER funds to the following activities:

- \$3 million for research related to natural gas efficiency.
- \$2.75 million for research related to the environment, including research on the air quality impacts of combustion of alternative gas supplies (off-spec and LNG) and research on climate change adaptation and mitigation issues.
- \$3 million for transportation related research.
- \$1.5 million for strategic analyses, including tool and model development to determine infrastructure needs, economic research, and security.
- \$750,000 for advanced generation, including combined cooling, heating, and power and natural gas reformers for fuel cells, turbines, and reciprocating engines.
- \$1 million for small grants for feasibility research.
- \$1.5 million for administration.

Funding for specific projects has not been awarded and research initiatives related to transportation still need to be developed. Furthermore, the commission indicates that the Five-Year workload and staffing plan for the PIER programs is still under review.

Staff Comments. Staff finds that the authority for the PIER program is set to expire at the end of the calendar year. Therefore, legislation is needed to expend PIER funding in the budget year. Legislation (SB 1250, Perata) has been introduced to address this issue.

Furthermore, staff finds that climate change and other environmental impacts of the energy sector are important issues facing the state. The PIER program has helped to address some of these issues through investments in energy efficiency and other research. However, more could be done to coordinate the research efforts of the PIER program with other research programs and to support environmental policies and goals, including those affecting climate change.

Staff Recommendation. Staff recommends that the Subcommittee take the following actions:

- Approve the Governor's budget proposal to augment the PIER natural gas staffing.
- Delete funding from the budget in support of the PIER program (\$69.9 million) and the natural gas PIER program (\$1.2 million).
- Adopt trailer bill language to appropriate the PIER monies and provide statutory authority to continue the PIER program.
- Adopt trailer bill language to establish in statute a natural gas PIER program and appropriate continuously appropriated natural gas PIER monies allocated to CEC.

3. Renewable Resources Trust Fund

Background. The Renewable Energy Program at the CEC provides subsidies to promote renewable energy in the state. This program is funded by a public goods charge on electricity sold by the investor-owned utilities which generates at least \$135 million annually. These funds are continuously appropriated. Only administrative costs associated with this program are subject to appropriation in the annual budget act.

May Revision. The Governor's May Revision proposes to transfer \$150 million from the General Fund to the Renewable Resource Trust Fund to repay a loan from this account made earlier in the decade.

Staff Comments. Staff finds that the CEC's statutory authority to expend funding on the Renewable Energy Program expires at the end of the calendar year. Therefore, legislation is needed to expend monies from the Renewable Resources Trust Fund in the budget year. Legislation (SB 1250, Perata) has been introduced to address this issue.

The role of the Renewable Energy Program has changed considerably over the past several years and is no longer the only program that encourages the use of renewable energy by the investor owned utilities and their customers. Statute now requires a Renewable Portfolio Standard for investor owned utilities. This legislation has increased the role of the California Public Utilities Commission (CPUC) in expanding the use of renewable energy sources through rates. Furthermore, in January, the CPUC approved \$2.5 billion in ratepayer funds for solar rebates over the next ten years.

Staff Recommendation. Staff recommends that the Subcommittee take the following actions:

- Delete funding from the budget in support of the Renewable Resources Trust Fund (\$5.5 million).
- Adopt trailer bill language to appropriate the Renewable Resources Trust Fund monies (including continuously appropriated monies) and provide statutory authority to continue the Renewable Energy Program.

8660 California Public Utilities Commission

1. Climate Change Initiative

Governor's Budget. The Governor's budget proposes to redirect 12 positions and use them to fund various climate change activities:

- One position to coordinate climate change activities at the PUC and to ensure climate change goals are being met.
- Three positions to be used to accelerate the renewable portfolio standard to 22 percent by 2020.
- One position to support the solar initiative, including expanding the current distributed generation program and consolidating other existing solar programs.
- Three positions to develop new programs and accelerate existing energy efficiency programs.
- One position to support the Governor's Executive Order to encourage green technology adoption by state buildings.
- Two positions to evaluate cap and trade programs and strategies for measuring and verifying emission reductions.
- One position to develop a new combined heat and power program for projects that are over five megawatts.

Half of the redirected positions are proposed to come from the consumer protection payphone program and the other six positions are redirected from other activities within the energy division.

Justification. Staff finds that most of the climate change programs being implemented by the CPUC are existing programs that have been established in statute, including the Renewable Portfolio Standard and energy efficiency. These programs have a more established track record as well as defined outcomes, which have been established in some cases. Furthermore, more staff is needed at the CPUC for tracking the implementation of these programs to ensure that they meet targets.

Staff finds that the commission cannot support redirecting all 12 positions internally to staff the climate change activities. Specifically, the energy division cannot support the redirections. The energy division is currently understaffed for the critical work related to electricity procurement, energy efficiency and demand response. All of this work is critical to ensuring electricity consumers the most reliable and lowest cost electricity service and also contributes to GHG emission reductions. Therefore, it does not make sense to reduce the department's activities in this area.

However, staff finds that six positions that currently support the payphone program can be redirected to fund new climate change positions. The commission currently has nine positions that support the commission's payphone programs, so this proposal would leave three remaining to support the programs. The commission indicates that the number of payphones in the state

has been falling dramatically over the last several years as our telecommunications system evolves. There were 200,000 payphones statewide three years ago, but the commission indicates there are now only 150,000 payphones statewide. The commission also notes that it only received 28 complaints about payphones in 2005. The commission indicates that it is currently revamping its payphone regulatory program to reduce its inspection activities and increase signage on the payphones that directs consumers to report payphones that do not work.

Staff Recommendation. Staff recommends that the Subcommittee approve the following climate change positions for the commission:

Activity	Current Staffing	Staffing Identified to Meet Mandates	Governor's Budget	Senate Proposal
Climate Action Programs				
- Coordination with Climate Action Team.	0.0	1.0	+1 (redirect)	1.0
- Accelerated implementation of the renewable portfolio standard.	0.0	3.0	+3 (redirect)	AAB (redirect from payphone program)
- California Solar Initiative.	0.0	1.0	+1 (redirect)	1.0
- Expand energy efficiency programs.	0.0	3.0	+3 (redirect)	AAB (redirect from payphone program)
- Implement the Green Buildings Initiative.	0.0	1.0	+1 (redirect)	1.0
- Electric Sector Carbon Policy.	0.0	2.0	+2 (redirect)	2.0
- Expand combined heat and power program.	0.0	1.0	+1 (redirect)	1.0
Total Climate Change Positions		12.0	0.0	6.0

2. Renewable Portfolio Standard Implementation

Background. In 2002, legislation (SB 1078, Sher) was enacted that committed the state to ensuring that one-fifth of the electricity it used was generated from renewable energy resources. The bill required both the Public Utilities Commission and the Energy Commission to take

various steps to implement a Renewable Portfolio Standard (RPS) applicable to investor-owned and municipal utilities, and other load serving entities (LSE's).

Staff Comments. Despite strong commitments from prior and current administrations, and vocal support from both commissions, recent reports suggest that implementation of the RPS has taken place in fits and starts. As a result, doubts have been raised as to whether the commissions and LSE's will meet the goals established under law and under the Governor's "Energy Action Plan." The Energy Action Plan established a goal of 20% renewable energy by 2010, but it is increasingly evident that this target will not be met unless state energy agencies act with greater urgency. Furthermore, the state's increasing vulnerability to skyrocketing natural gas and oil prices necessitates taking new and urgent steps to accelerate cost-effective renewable energy investment in order to protect consumers, the state's economy, and the environment. Staff finds that implementation of the RPS is also central to climate change objectives.

Staff Recommendation. Staff recommends that the Subcommittee approve supplemental report language to require quarterly reporting to the Legislature beginning October 1, 2006 of the following information:

- The progress of each investor owned electric utility toward achieving RPS program goals and requirements.
- A work plan, schedule, and status report for all of the procurement, transmission development, and other activities the commission has undertaken, and plans to undertake, to ensure achievement of RPS program goals and requirements.
- A description of actions taken by each investor owned electric utility to ensure adoption of a work plan and implementation schedule to achieve RPS program goals and requirements.

3900 Air Resources Board

1. Climate Change Initiative.

Governor's Budget. The budget includes \$5.2 million to support the Governor's greenhouse gas emission reduction targets. The budget includes \$1.9 million from the Motor Vehicle Account (MVA) and \$3.3 million from the Air Pollution Control Fund (APCF). The MVA funds will be used to support 15.5 positions and the APCF will be used to fund one-time contracts for various research efforts. The additional positions will support the following activities:

- **Bio-fuel Blends.** Two positions to develop and propose regulations related to bio-fuel blends.
- **Perfluorocarbon Emission Reductions.** One position to develop control measures and technology options for reducing emissions from the semi-conductor industry.
- **Manure Management.** One position to develop and propose regulations for manure management options.
- **Refrigerated Transport.** One position to develop and propose regulations to require new refrigerated trucks to be equipped with electric stand-by systems.
- **Port Electrification.** Two positions to develop and propose measures to phase-in infrastructure allowing vessels to plug in for shore-side power.
- **Hydrofluorocarbon Emission Reductions.** Three positions to develop and adopt measures to maximize the use of low global warming potential refrigerants in mobile, commercial and residential air conditioning.
- **Light-Duty Vehicles.** One position to develop and propose policies for the implementation of lightweight materials and cool paints to reduce emissions from light-duty vehicles.
- **Heavy-Duty Vehicles.** Two new positions to implement AB 1493 (Pavley) and the Teach the Trainer Program for increasing fuel efficiency.
- **Economic Analysis.** 1.5 positions for continued economic analysis related to various GHG emission reduction efforts.
- **Climate Change Science.** One position to support analysis related to climate change science.

The contract funds are allocated equally among contracts that explore the relationship between air quality and climate change and research that provides direct support for the board's regulatory strategies.

Justification. Staff finds that most of the positions being requested by the ARB are to support the development of new regulatory programs. These programs will be critical to reducing GHG emissions in the future. However, staff finds that there are no timelines identified in the budget proposal for developing these regulatory programs. Furthermore, the board proposes funding for research and it is unclear why this research is not being funded by the PIER program or what GHG emission strategy this research will address.

Staff Recommendation. Staff recommends that the Subcommittee take the following actions:

- Approve \$1.9 million from the MVA to support 15.5 positions.
- Reject \$3.3 million for various research contracts.
- Evaluate the need for additional monies in trailer bill discussions.

2. Hydrogen Highway

Governor's Budget. The Governor's Budget includes \$6.5 million in special funds for the second year of implementation of the Governor's Hydrogen Highway Blueprint. A portion of the funding (\$1.5 million) will be used to leverage private matching funds to construct three publicly accessible hydrogen fueling stations. The remaining funding (\$5 million) will enable the state to leverage federal matching funds for five fuel cell buses to be used in public transit fleets.

The budget also proposes to re-appropriate \$3.5 million allocated to the board in the current year. The board does not anticipate that these funds will be expended before December 31, 2006 because of the myriad of issues that need to be worked out before a hydrogen fueling station can be sited.

LAO Recommendation. The LAO recommends denying the administration's request for additional funding for the Hydrogen Highway. The LAO finds the request for additional funding premature until the board submits a statutorily required report to the Legislature. This report is intended to provide the Legislature with information that will enable an evaluation of whether continued funding for this purpose is warranted. This report is not due to the Legislature until December 31, 2006. Furthermore, the LAO indicates that approximately \$3.5 million of the original appropriation will be available for expenditure in the budget year. Therefore, it is unclear why additional funding is needed.

Staff Comments. Staff finds that the Governor signed an executive order in April 2006 that sets goals for the in-state production of ethanol and other biofuels. California currently burns more than 900 million gallons of ethanol fuel each year, or nearly a quarter of all the ethanol produced in the United States, but only 5 percent of the ethanol fuel consumed in the state is produced there. California's new goals are to produce 20 percent of the state's biofuels within the state by 2010, increasing to 40 percent by 2020 and 75 percent by 2050. It is unclear how this recent initiative will be funded. Furthermore, it is unclear how the Hydrogen Highway fits into the state's overall policy on alternative fuels. Hydrogen certainly has a future, but there are many technologies, including biofuels, that are available now and which can drastically reduce emissions from motor vehicles.

Furthermore, staff concurs with the LAO regarding the need to review the report that is due to the Legislature. It will be important to review the findings in this report before additional monies are allocated to this program.

Staff Recommendation. Staff recommends that the Subcommittee take the following actions:

- Reject the Governor's budget proposal.

3910 Integrated Waste Management Board

1. Climate Change Initiative

Governor's Budget. The Governor's Budget includes \$466,000 in special funds to fund three new positions to expand existing efforts to capture methane from landfills and enhance recycling efforts to meet the Governor's greenhouse gas emission reduction targets.

Staff Comments. Staff finds that it is already the policy of the state to expand the capture of methane from landfills and to enhance recycling efforts. It is unclear why additional positions are needed at the board for these activities.

Staff Recommendation. Staff recommends that the Subcommittee take the following actions:

- Reject the budget proposal.
- Evaluate the need for additional monies in trailer bill discussions.